

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-8 are pending in this application.

Outstanding Action

The outstanding Office Action includes a rejection of Claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Kimura et al (U. S. Patent No. 6,348,850, Kimura); a rejection of Claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Kimura in view of Aoki et al (U. S. Patent No. 6,535,095, Aoki '095); a rejection of Claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Kimura in view of Aoki et al (JP 2002-075722, Aoki '722); a rejection of Claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Kimura or Murakami et al (JP 2000-311816, Murakami) in view of Wada (JP 02-042705); a rejection of Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Kimura or Murakami in view of Wada and further in view of Aoki '095; a rejection of Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Kimura or Murakami in view of Wada and in further view of Aoki '722; a rejection of Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Wang (U. S. Patent No. 6,778,055) or Hirai et al (U. S. Published Patent Application No. 2003/0030526, Hirai) in view of Wada; a rejection of Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada and in further view of Kimura; a rejection of Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada and in further view of Aoki '095; and a rejection of Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada and in further view of Aoki '722.

Improper Reliance as to Wada (JP 02-042705)

MPEP 706.02(II) makes it clear that the PTO requires that a translation must be provided of any foreign document cited and relied on as follows:

If the document is in a language other than English and the examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection.

Here, the underlying foreign document (JP 02-042705) has been relied on as to the assertion at page 5, lines 3-4 and page 7, lines 13-14, of the outstanding Action that “Wada (figs. 1(a)-3) discloses a core having a plurality of concave/convex portions to position the coil/wire.” Thus, the stated reliance on “figs. 1(a)-3” required that “a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection.” However, no such translation has been provided to Applicants in clear disregard for this requirement.

This section of the MPEP further notes that it is only after an applicant has been supplied a translation of the document that is not in English that the propriety of making the Action containing the translation final can be determined as follows:

When both the abstract and the underlying document qualify as prior art, the underlying document should normally be used to support a rejection. In limited circumstances, it may be appropriate for the examiner to make a rejection in a non-final Office action based in whole or in part on the abstract only without relying on the full text document. In such circumstances, the full text document and a translation (if not in English) may be supplied in the next Office action. Whether the next Office action may be made final is governed by MPEP § 706.07(a).

As the outstanding Action did not include the required translation of the relied upon underlying document (JP 02-042705) that is not in the English language, it is clear that the indication that the outstanding Action has been made final is not proper under these MPEP guidelines.

Summary of the Invention

As noted in the last response, independent Claim 1 subject matter includes a common-mode filter with a drum type core including a core portion and a pair of flange portions. Electrodes are provided on the pair of flange portions. A pair of wires is wound on the core portion. Each of the flange portions has a groove between corresponding two of the electrodes, and a separation protrusion for separating the groove into two. The pair of wires is wound on the core portion of the drum type core in a distributed winding manner so as to provide an inter-wire distance between the pair of wires with no part of any wound wire, including any insulating portion of a wound wire, contacting any other part of any other wound wire while also providing a winding pitch between adjacent turns of each of the pair of wires. The pair of wires is one-by-one led out through the grooves formed to facilitate lead out while separated by the separation protrusions so that the ends of the pair of said wires are connected to respective ones of the electrodes.

As further pointed out in the last response, the subject matter of base independent Claim 5 includes, *inter alia*, a core portion of the drum type core having a plurality of positioning convex or concave portions formed for positioning the pair of wires so that no part of any wound wire, including any insulating portion of a wound wire, contacts any other part of any other wound wire while also keeping the pitch between the pair of wires constant.

Rejection Traversals

Turning to the rejection of Claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Kimura, it is first noted that Figs. 6 (a)-6(c) do not show all the subject matter of base independent Claim 1 which is also included in Claim 2 by reason of Claim 2 being directly dependent on Claim 1.

In this first respect, Claim 1 recites, in part:

wherein each of said flange portions of said drum type core has a groove between corresponding two of said electrodes, and a separation protrusion for separating said groove into two [emphasis added]

Fig 6 (c) of Kimura shows two electrodes 5a and 5c, but there is clearly no groove shown between these electrodes as they both are shown to contact the sidewalls of the “protrusion 4,” the only thing that is taught by these Figures to be between the electrodes 5a and 5c. The manner that the outstanding Action has determined that this “protrusion 4” can be reasonably interpreted to be a “groove” that has been separated into two by itself is not explained.

Further in this last respect, a “groove” is well understood to be a cut or indentation in a substrate surface¹ and, thus, must have two groove sidewalls extending down to the groove bottom in that substrate, two side walls extending up from the substrate surface to form a raised plateau. As was noted in the last response, the PTO is required by precedent to use the plane meaning of the claim language. See *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997) (“[T]he PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art . . .”).

Accordingly, as the only thing that can be reasonably said to be between the electrodes 5a and 5c of Fig. 6(c) of Kimura is a “protrusion 4” that cannot be reasonably interpreted to form any part of a “groove,” this rejection of Claims 1 and 2 is traversed as being clearly improper.

Not only is the rejection of Claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Kimura improper because it misinterprets a projection between two electrodes

¹ See Webster's Encyclopedic Unabridged Dictionary of the English Language, ©1989 at page 624 defining “groove” to be known as “1. a long, narrow cut or indentation occurring in a surface or formed there by some means or agency.”

as being part of a groove, it is further improper in relying on ambiguous drawing details and drawing measurements taken as to drawings not disclosed to be to any particular scale.

In these respects, the outstanding Action points to Fig. 6(b) of Kimura as teaching the “inter-wire distance” that must be less than the width of the “separation protrusion” that are specified by base Claim 1. The only possible way to conclude that such a teaching is present is to actually measure the distance between two of the many wires shown in Fig 6(b) and to compare this measured distance to the measured width of the “separation protrusion 4” shown in Fig. 6(c) or the different width of the “separation protrusion 4” measured from Fig. 6(a). The requirement to take these measurements from these Figures is clear as the description of these Figures include no teachings as to any relationship between the width of the “separation protrusion 4” and any spacing between the wires wound on the winding core 2.

However, the problem arises that both Fig. 6(a) and Fig. 6(b) show wires wound on the winding core 2, but there is no showing of any consistent distance being provided between the wires in either of these Figures, much less in relied upon Figure 6(b). In this regard, both Fig. 6(a) and Fig. 6(b) are ambiguous to what can be interpreted to be comparable to the Claim 1 “inter-wire distance” because they both show many different inter-wire distances between different pairs of wires.

For example, looking from left to right at the wires shown at the top edge of the winding core 2 of Fig. 6(b), the distance between these wires is not fixed. The first distance shown between the two solid double line wires is the smallest and much smaller than the large distance between the rightmost of this double line wire pair and the leftmost of the next double line wire pair shown in dotted lines in Fig 6(b). The last illustrated distance between these left side double line wire pair shown in dotted lines in Fig 6(b) is somewhere between the smaller and larger inter-wire distances already noted.

Besides these different inter-wire distances of Fig. 6(b), Fig. 6(a) adds to the illustration of different distances between wires and adds to the confusion by illustrating some wires as but single line showings while others are shown using double lines as in Fig. 6(b). Note the different distances illustrated by Fig. 6 (a) as between solid line wires, between the dotted line wires, and as between the solid and dotted wires shown at the bottom edge of the winding core 2 of Fig 2(a).

Besides these ambiguities as to the wires to choose to measure the Claim 1 “inter-wire distance,” it is further ambiguous as to which of the illustrated different widths of the protrusion 4 should be measured because fig. 6(a) illustrates the width of the protrusion 4 to be a different distance in comparison to the width shown in Fig. 6(c).

It is well established that such ambiguous showings that are subject to different interpretations cannot be relied upon to establish anticipation. *See, e.g., In re Turley*, 304 F.2d 893, 899, 134 USPQ 355, 360 (CCPA 1962).

Besides the problem of the ambiguous nature of the various above noted distances, there is also a clear lack of clarity and definiteness as to the showings of Figs 6(a)-6(c) intentionally showing any specific distance between wires wound on core 2, much less that the width of the protrusion is to always be wider than this distance between wires wound on the core 2. However, the case law requires both clarity and definiteness, not speculation. *See In re Hughes*, 145 USPQ 467, 471 (CCPA 1965) and *In re Moreton*, 129 USPQ 227, 230 (CCPA 1961). Besides the lack of clarity and definiteness as to the ambiguities noted above, there is further lack of clarity and definiteness as to the relationship between the wires shown by solid lines and those shown by dotted lines in Figs. 6(a) and 6(b). This lack of clarity and definiteness as to solid and dotted line showings of wires is compounded by the Fig. 6(a) showing of two dotted line wires extending from electrode 5d that appear to become the single line solid wire from electrode 5a. Also lacking clarity and definiteness is the Fig. 6(c)

showing of two wires that are both labeled as “6” engaging the two different electrodes 5a and 5c.

In addition to improper reliance on ambiguous disclosures coupled with the above-noted lack of clarity and definiteness as to the showings of Figs 6(a)-6(c) of Kimura, the outstanding Action improperly relies on comparative measurements made directly from the drawings that are not disclosed to be drawn to any particular scale. In this regard, it is respectfully submitted that the showings of Figs. 6(a)-6(c) are abstract as concerns the showings as to wires. The situation is, thus, the same as in *In re Wright*, 193 USPQ 332, 335 (CCPA 1977) and *In re Chitayat*, 151 USPQ 224, 226 (CCPA 1969) that note such drawings cannot be relied upon to provide measurements to establish clear reference teachings. Further note *In re Wilson*, 136 USPQ188, 192, (CCPA 1963) that specifically points out that because “[p]atent drawings are not working drawings,” arguments predicated on portions of drawings “obviously never intended to show the dimensions of anything,” like the arguments in the outstanding Action as to “inter-wire distance” and the width of the protrusion 4, are misplaced.

Accordingly, the rejection of Claims 1 and 2 as being anticipated by Kimura is traversed for the reasons noted above.

Turning to the rejection of Claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Kimura in view of Aoki ‘095, it is noted that Claim 3 depends on Claim 1 and that Aoki ‘095 does not cure the deficiencies in Kimura that are noted above. Accordingly, even if the artisan would have been properly motivated to modify Figs 6(a)-6(c) of Kimura by teachings found in Aoki ‘095, the result would not include all the subject matter of Claim 3 that includes the subject matter of Claim 1 because of Claim 3 dependency on Claim 1 and this rejection is respectfully traversed for at least this reason.

Moreover, the apparent suggestion in the outstanding Action that the artisan would have had some logical reason to adopt the extra layers suggested by Aoki '095 to modify Kimura is contrary to the Kimura teaching at col. 1, lines 44-46 as to reducing size. This modification is, thus, not one the artisan would have been motivated to adopt and this rejection is traversed for this reason as well.

The rejection of Claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Kimura in view of Aoki '72 is correspondingly without merit and should be withdrawn as Aoki '722 does not cure the deficiencies in Kimura. Accordingly, even if the outstanding Action established valid reasons why the artisan would have been led to modify Fig. 6(a)-6(c) of Kimura by the relied upon teachings in Aoki '722, the result would not be all of the subject matter of rejected Claim 4. Therefore, no valid case of *prima facie* obviousness has been established and this rejection of Claim 4 is also traversed.

Turning to the 103(a) rejection of Claims 5 and 6 as being unpatentable over Kimura or Murakami in view of Wada, the 103(a) rejection of Claim 7 as being unpatentable over Kimura or Murakami in view of Wada and Aoki '095, the 103(a) rejection of Claim 8 as being unpatentable over Kimura or Murakami in view of Wada and Aoki '722, the 103(a) rejection of Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hira in view of Wada, the 103(a) rejection of Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada in further view of Kimura, the 103(a) rejection of Claim 7 as being unpatentable over Wang or Hirai in view of Wada in further view of Aoki '095, and the 103(a) rejection of Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada in further view of Aoki '722, these 103(a) rejections all rely on a basic misconception that the Wada core of Figs. 1(a)-3 is taught to simply "position" the wires of a coil and that this core with its convex and concave portions each supporting a wire of the coil can be used as the core of Kimura or Murakami or as the

core of Wang or Hira. There is further no statement in the abstract of Wada that suggests the “plurality of concave/convex portions” of the core 2 are intended to be used with non-adjustable coils like the coil-core arrangements having cores with flanges at each end as with any of Kimura, Murakami, Wang, or Hira. Instead of teaching that threads 3 (the “plurality of concave/convex portions”) “regulate the pitch between wire turns “as urged at page 5, line 7, or page 7, line 17, the actual statement in the “CONSTITUTION” of the Wada abstract is that the core 2 is to have “threads 3 on the outer periphery thereof” that are “adapted to be inserted into the coil 1.” Then, because “the coil 1 is wound at a different pitch from the pitch of threads 3 on the core 2, the winding pitch of the coil 1 is made forcibly coincident with the pitch on the threads 3 on the core 2 and the coil 1 is pressed against the inclined faces of the thread grooves 4 [sic, 3] on the core 2 by the spring action generated when the core 2 is screwed into the core [sic, coil] 1.” Note, for example, the compression of the coil 1 portion engaged by the threads on core 2 as that core is “screwed” into coil 1 as shown by the Fig. with the abstract. There is no and can be no flange on the insertion end of the Wada core 2 or it cannot function as intended to be screwed into and out of the coil 1 so as to vary inductance as specified in the “PURPOSE” portion of the abstract and at the end of the “CONSTITUTION” portion of the abstract teaching a “variable range of inductance” that can “be enlarged or reduced.”

Clearly, the basic operating principle of the Wada variable coil and core and the disclosed manner of use is that the core 2 with its threads 3 is to be “screwed” into and out of a preformed coil to different degrees to engage with different numbers of turns of coil 1 so as to regulate inductance and enable the “variable range of inductance” that can “be enlarged or reduced” as noted above. Thus, this variable coil for varying the core and coil relative positions is an arrangement requiring a core that can enter into the coil 1 and engage with the individual turns of this coil that cannot be accomplished with the flanged cores of Kimura,

Murakami, Wang, or Hira. Not only would the flanges prevent the use of a threaded core in the manner taught by Wada, the attachment of the coil wires of these references to the flanges would also not permit the cores to be screwed into and out of different pitch coils to obtain a variable range of inductance as taught by Wada.

Therefore, situation is much like that in *In re Rouffet*, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998) where the court noted the disparate teachings of the references relied upon and the need for motivation to established as to choosing such disparate references for combination. The court in *Rouffet* (at 47 USPQ 1457-58) emphasized the need for proper “motivation” as follows:

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

Here the outstanding Action does little more than suggest that the threads 3 of Wada would be taken out of the context of their disclosed usefulness as to varying inductance as to the turns of one coil and be applied to the stationary core-two coil arrangements of Kimura, Murakami, Wang, or Hira, for no particular reason other than a threaded coil is shown by Wada being used with one coil. Even if Wada could be said to teach the use of threads to maintain the pitch of a single coil instead of the actual teaching of changing the inductance of the single coil by varying the core position in the single coil, nothing in Wada suggests the use of the threaded core with two coils.

The PTO appears to suggest that because a core with convex/concave portions was known for use with a single coil, it is obvious to use it in a completely different arrangement with two coils and with cores having electrodes provided on a pair of flange portions of a drum type core. This appears to be similar to the approach adopted by the PTO in the above-

noted *Rouffet* case in which the court found this rationale to be based on impermissible hindsight, not motivation in the prior art (at 47 USPQ 1457) as follows:

Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

Accordingly, the 103(a) rejection of Claims 5 and 6 as being unpatentable over Kimura or Murakami in view of Wada, the 103(a) rejection of Claim 7 as being unpatentable over Kimura or Murakami in view of Wada and Aoki '095, the 103(a) rejection of Claim 8 as being unpatentable over Kimura or Murakami in view of Wada and Aoki '722, the 103(a) rejection of Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hira in view of Wada, the 103(a) rejection of Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada in further view of Kimura, the 103(a) rejection of Claim 7 as being unpatentable over Wang or Hirai in view of Wada in further view of Aoki '095, and the 103(a) rejection of Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Wang or Hirai in view of Wada in further view of Aoki '722, are all traversed because the outstanding Action has failed to establish a reasonable basis for motivation to add the screw thread 3 of Wada to any of Kimura, Murakami, Wang, or Hira as discussed above.

As no further issues are believed to remain outstanding in the present application, it is believed that this application is clearly in condition for formal allowance and an early and favorable action to that effect is, therefore, respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Gregory J. Maier", is written over the printed name.

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